

STATE OF INDIANA, }
MARION COUNTY, } S S

Second Monday in February, Being February 12, 1900.

HARRY B. SMITH,
Auditor Marion County, Indiana.

great light-gathering power. But so much depends upon the sensitivity of the astronomer's eye, and upon the skill of the observing, that we are not necessarily sure of doing more with our great instruments than can be accomplished with smaller, simpler instruments. It is to make an astronomical observation, three things have to be brought into the same straight line, the eye, the instrument, and the heavenly body. The man behind the telescope counts heavily in the final result.

The Potsdam Observatory, though only about 18 years old, has already become famous. One devoted exclusively to the comparatively new science of astrophysics, instead of the older astronomy, it has adopted modern methods and positions. The astrophysicist studies with the spectroscope the chemical constitution of the heavenly bodies, and the modern astronomer determines their position with that instrument. A particular specialty has been made at Potsdam of photographing spectral doublets of motion in space. It is not too much to say that the perfection of the methods now used for this purpose is in large measure due to Potsdam. But it is precisely this extremely interesting and important kind of observation that requires the most delicate instruments. So, while Vogel and Scheiner at Potsdam have been able to devise and perfect new methods of observation, they have been limited in the use of the most of the very brightest stars. Now, through the intelligent interest of the Emperor, we are able to use the most powerful Statistical Information about the velocities of a large number of stars is essential to the solution of problems relating to the origin and evolution of the universe. It is now in a fair way to obtain, since the special skill of the Potsdam Observatory in this particular is well known. The work will be exercised with adequate skill of mental facilities.